Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-23 (previously canceled)

Claim 24 (currently amended): A fiber optic communications module, comprising:

a set of optical fibers supported in an optical ferrule having a set of alignment holes;

a silicon substrate carrier including a set of alignment apertures which are etched into said silicon substrate using photolithography techniques and is adapted for cooperating with an alignment structure of said optical ferrule and aligning said silicon substrate carrier with said optical ferrule;

a set of guide pins adapted for mating with said set of alignment holes and said set of alignment apertures; and

an optoelectronic device having a set of photoactive components corresponding to said set of optical fibers in said optical ferrule which is mounted on so as to be precisely aligned with said set of alignment apertures so that said set of photoactive components are aligned for optical communication through a window section of said silicon substrate carrier with said set of optical fibers when said set of guide pins are mated with said set of alignment holes and said set of

alignment apertures and said silicon substrate carrier is coupled to said optical ferrule, and wherein

a transparent film layer is deposited on a surface of said silicon substrate carrier using photolithography techniques, and wherein

said transparent film layer comprising at least one of silicon nitride, polysilicon, and polyimide.

Claim 25 (previously presented): The fiber optic communications module according to claim 24, wherein:

photoactive components of said set of photoactive components are arranged in a first linear array, and

optical fibers of said set of optical fibers are arranged in a second linear array corresponding to said first linear array.

Claim 26 (previously presented): The fiber optic communications module according to claim 24, further including:

a second alignment structure for said optoelectronic device deposited on said silicon substrate carrier using photolithography techniques.

Claim 27 (previously presented): The fiber optic communications module according to claim 26, wherein:

said second alignment structure comprises at least one metal trace.

Claim 28 (previously presented): The fiber optic communications module according to claim 24, wherein:

said set of photoactive components comprise PIN photodiodes.

Claim 29 (previously presented): The fiber optic communications module according to claim 24, further including:

a support block including one or more support passages formed therein to receive the set of guide pins for securely supporting said set of guide pins and said silicon substrate carrier in precisely aligned positions.

Claim 30 (canceled)

Claim 31 (canceled)

Claims 32-50 (previously canceled)